IN THE CLAIMS

Please cancel claim 33 without prejudice to Applicants' right to pursue the subject matter of this claim in a future application. Please amend claims 31, 36-39 and 44-47 as follows:

31. (CURRENTLY AMENDED) A ~~synthetic~~ soluble peptide made by solid phase synthesis comprising all or a fragment or variant of a regulatory virus protein R (Vpr) of the human immunodeficiency virus type 1(HIV-1) (SEQ ID NO: 1), ~~or a fragment or variant thereof,~~ wherein the fragment or variant thereof consists of a peptide selected from the group consisting of:

(a) a 20 amino acid Vpr protein ($_s$Vpr$^{1-20}$ or $_s$Vpr$^{21-40}$; SEQ ID NO: 8 and 9, respectively);

(b) a 47 amino acid N-terminal peptide ($_s$Vpr$^{1-47}$; SEQ ID NO: 2);

(c) a 49 amino acid long C-terminal peptide ($_s$Vpr$^{48-96}$; SEQ ID NO: 3); ~~or~~

(d) ~~a fragment of at least 15 amino acids of any one of (a)-(c)~~

$_s$Vpr$^{11-25}$ (SEQ ID NO: 4); or

(e) $_s$Vpr$^{46-60}$ (SEQ ID NO: 6).

32. (PREVIOUSLY PRESENTED) The synthetic peptide of claim 31, consisting of $_s$Vpr$^{1-96}$ (SEQ ID NO: 1).

33. (CANCELLED)

34. (PREVIOUSLY PRESENTED) The synthetic peptide of claim 31 bound to a second molecule, wherein the second molecule comprises a DNA or protein molecule.

35. (PREVIOUSLY PRESENTED) The synthetic peptide of claim 32 bound to a second molecule, wherein the second molecule comprises a DNA or protein molecule.

PAGE 8/26 * RCVD AT 2/25/2004 5:59:32 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/0 * DNIS:8729307 * CSID:+13106418798 * DURATION (mm-ss):06-54

36. (CURRENTLY AMENDED) A ~~pharmaceutical~~ composition comprising the synthetic peptide of claim 31 and a ~~pharmaceutically acceptable~~ carrier.

37. (CURRENTLY AMENDED) A ~~pharmaceutical~~ composition comprising the synthetic peptide of claim 32 and a ~~pharmaceutically acceptable~~ carrier.

38. (CURRENTLY AMENDED) A ~~pharmaceutical~~ composition comprising the synthetic peptide of claim 34 and a ~~pharmaceutically acceptable~~ carrier.

39. (CURRENTLY AMENDED) A ~~pharmaceutical~~ composition comprising the synthetic peptide of claim 35 and a ~~pharmaceutically acceptable~~ carrier.

40. (WITHDRAWN) A method of producing synthetic peptides derived from the regulatory virus protein R (Vpr) of HIV-1, the method comprising:

(a) synthesizing C-terminal Vpr peptides on a serine resin; and

(b) synthesizing N-terminal Vpr peptides on a polystyrene polyoxyethylene resin;

wherein chain elongation of the peptides is performed using fluoromethyloxycarbonyl (FMOC) protection.

41. (WITHDRAWN) The method of claim 40, further comprising:

(c) cleaving protection groups using a cleavage mixture comprising 95% trifluoracetic acid (TFA), 3% triisopropylsilane and 2-5% ethyandithiol.

42. (WITHDRAWN) The method of claim 40, further comprising purifying the peptides by HPLC on a column of silica gel using a linear gradient of TFA and water in acetonitrile.

43. (WITHDRAWN) A synthetic Vpr peptide produced by the method of claim 40.

PAGE 9/26 * RCVD AT 2/25/2004 5:59:32 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/0 * DNIS:8729307 * CSID:+13106418798 * DURATION (mm-ss):06-54

44. (CURRENTLY AMENDED) A biological assay ~~system~~ product comprising a synthetic peptide of claim 31 immobilized on a substrate.

45. (CURRENTLY AMENDED) A biological assay ~~system~~ product comprising a peptide of claim 32 immobilized on a substrate.

46. (CURRENTLY AMENDED) The biological assay ~~system~~ product of claim 44, ~~which comprises an ELISA~~ wherein the substrate comprises an ELISA carrier surface.

47. (CURRENTLY AMENDED) The biological assay ~~system~~ product of claim 45, ~~which comprises an ELISA~~ wherein the substrate comprises an ELISA carrier surface.

PAGE 10/26 * RCVD AT 2/25/2004 5:59:32 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/0 * DNIS:8729307 * CSID:+13106418798 * DURATION (mm-ss):06-54